



PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/519,335
Filing Date	December 22, 2004
First Named Inventor	Laurent Cavarec
Art Unit	
Examiner Name	
Attorney Docket Number	G-194US03PCT

Sheet

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of

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/OC/	U1	US-6,372,767 B1	04-16-2002	McNaughton-Smith <i>et al.</i>	All
/OC/	U2	US-6,472,165 B1	10-29-2002	Rundfeldt <i>et al.</i>	All
	U3	US-			
	U4	US-			
	U5	US-			
	U6	US-			
	U7	US-			
	U8	US-			
	U9	US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
/OC/	F1	WO 01/91026 A2	11-29-2001	Genset	All	
/OC/	F2	WO 99/31232 (CD-ROM)	06-24-1999	Zeneca Limited	All	
/OC/	F3	WO 01/09612 A2 (CD-ROM)	02-08-2001	Arzneimittelwerk Dresden	All	
/OC/	F4	WO 02/12279 A2 (CD-ROM)	02-14-2002	Genset	All	
/OC/	F5	WO 03/019186 A2	03-06-2003	Glaxo Group Limited <i>et al.</i>	All	
	F6					
	F7					

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/OCI	R1	ALTSCHUL, S. F. <i>et al.</i> "Basic Local Alignment Search Tool" <i>J. Mol. Biol.</i> , 1990, pp. 403-410, Vol. 215.	
	R2	ALTSCHUL, S. F. <i>et al.</i> "Gapped BLAST and PSI-BLAST: A New Generation of Protein Database Search Programs" <i>Nucleic Acids Research</i> , 1997, pp. 3389-3402, Vol. 25, No. 17.	
	R3	ANDRIEUX, A. <i>et al.</i> "The Suppression of Brain Cold-Stable Microtubules in Mice Induces Synaptic Defects Associated with Neuroleptic-Sensitive Behavioral Disorders" <i>Genes and Development</i> , 2002, pp. 2350-2364, Vol. 16.	
	R4	BIERVERT, C. <i>et al.</i> "A Potassium Channel Mutation in Neonatal Human Epilepsy" <i>Science</i> , January 16, 1998, pp. 403-406, Vol. 279.	
	R5	BIERVERT, C. <i>et al.</i> "Structural and Mutational Analysis of <i>KCNQ2</i> , the Major Gene Locus for Benign Familial Neonatal Convulsions" <i>Hum. Genet.</i> , 1999, pp. 234-240, Vol. 104.	
	R6	BORRESEN, A-L. <i>et al.</i> "Detection of Base Mutations in Genomic DNA using Denaturing Gradient Gel Electrophoresis (DGGE) followed by Transfer and Hybridization with Gene-Specific Probes" <i>Mutation Research</i> , 1988, pp. 77-83, Vol. 202.	
	R7	DEMPSTER, A. P. <i>et al.</i> "Maximum Likelihood from Incomplete Data via the EM Algorithm" <i>JRSSB</i> , 1977, pp. 1-38, Vol. 39.	
	R8	DETERA-WADLEIGH, S. D. <i>et al.</i> "A High-Density Genome Scan Detects Evidence for a Bipolar-Disorder Susceptibility Locus on 13q32 and other Potential Loci on 1q32 and 18p11.2" <i>Proc. Natl. Acad. Sci. USA</i> , May 1999, pp. 5604-5609, Vol. 96.	
	R9	DEVEREUX, J. <i>et al.</i> "A Comprehensive Set of Sequence Analysis Programs for the VAX" <i>Nucleic Acids Research</i> , 1984, pp. 387-395, Vol. 12, No. 1.	
	R10	ELBASHIR, S. M. <i>et al.</i> "RNA Interference is Mediated by 21 and 22-Nucleotide RNAs" <i>Genes and Development</i> , 2001, pp. 188-200, Vol. 15.	
	R11	ELLINGTON, A. D. <i>et al.</i> "In vitro Selection of RNA Molecules that Bind Specific Ligands" <i>Nature</i> , August 30, 1990, pp. 818-822, Vol. 346.	
✓	R12	EXCOFFIER, L. <i>et al.</i> "Maximum-Likelihood Estimation of Molecular Haplotype Frequencies in a Diploid Population" <i>Mol. Biol. Evol.</i> , 1995, pp. 921-927, Vol. 12, No. 5.	

Examiner Signature	/Olga Chernyshev/	Date Considered	04/30/2007
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				Group Art Unit	
				Examiner Name	
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NON PATENT LITERATURE DOCUMENTS			
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IOC/	R13	GAMPER, N. <i>et al.</i> "Subunit-Specific Modulation of KCNQ Potassium Channels by Src Tyrosine Kinase" <i>Journal of Neuroscience</i> , January 1, 2003, pp. 84-95, Vol. 23, No. 1.	
	R14	GRANTHAM, R. "Amino Acid Difference Formula to Help Explain Protein Evolution" <i>Science</i> , September 6, 1974, pp. 862-864, Vol. 185.	
	R15	GROMPE, M. <i>et al.</i> "Scanning Detection of Mutations in Human Ornithine Transcarbamoylase by Chemical Mismatch Cleavage" <i>Proc. Natl. Acad. Sci. USA</i> , August 1989, pp. 5888-5892, Vol. 86.	
	R16	HU, P. <i>et al.</i> "Molecular Cloning and Mapping of the Brain-Abundant B1γ Subunit of Protein Phosphatase 2A, PPP2R2C, to Human Chromosome 4p16" <i>Genomics</i> , 2000, pp. 83-86, Vol. 67.	
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	R20	LESSA, E. P. <i>et al.</i> "Screening Techniques for Detecting Allelic Variation in DNA Sequences" <i>Molecular Ecology</i> , 1993, pp. 119-129, Vol. 2.	
	R21	MAIN, M. J. <i>et al.</i> "Modulation of KCNQ2/3 Potassium Channels by the Novel Anticonvulsant Retigabine" <i>Molecular Pharmacology</i> , 2000, pp. 253-262, Vol. 58.	
	R22	NEWTON, C. R. <i>et al.</i> "Analysis of any Point Mutation in DNA. The Amplification Refractory Mutation System (ARMS)" <i>Nucleic Acids Research</i> , November 7, 1989, pp. 2503-2516, Vol. 17, No. 7.	
✓	R23	ORITA, M. <i>et al.</i> "Detection of Polymorphisms of Human DNA by Gel Electrophoresis as Single-Strand Conformation Polymorphisms" <i>Proc. Natl. Acad. Sci. USA</i> , April 1989, pp. 2766-2770, Vol. 86.	

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/OC/	R24	PAN, Z. <i>et al.</i> "Alternative Splicing of KCNQ2 Potassium Channel Transcripts Contributes to the Functional Diversity of M-Currents" <i>Journal of Physiology</i> , 2001, pp. 347-358, Vol. 531.2.	
	R25	PEARSON, W. R. "Rapid and Sensitive Sequence Comparison with FASTP and FASTA" <i>Methods in Enzymology</i> , 1990, pp. 63-98, Vol. 183.	
	R26	PEARSON, W. R. <i>et al.</i> "Improved Tools for Biological Sequence Comparison" <i>Proc. Natl. Acad. Sci. USA</i> , April 1988, pp. 2444-2448, Vol. 85.	
	R27	RUANO, G. <i>et al.</i> "Haplotype of Multiple Polymorphisms Resolved by Enzymatic Amplification of Single DNA Molecules" <i>Proc. Natl. Acad. Sci. USA</i> , August 1990, pp. 6296-6300, Vol. 87.	
	R28	SARKAR, G. <i>et al.</i> "Haplotyping by Double PCR Amplification of Specific Alleles" <i>BioTechniques</i> , 1991, pp. 436-440, Vol. 10, No. 4.	
	R29	SCHWAKE, M. <i>et al.</i> "Surface Expression and Single Channel Properties of KCNQ2/KCNQ3, M-Type K ⁺ Channels Involved in Epilepsy" <i>Journal of Biological Chemistry</i> , May 5, 2000, pp. 13343-13348, Vol. 275, No. 18.	
	R30	SINGH, N. A. <i>et al.</i> "A Novel Potassium Channel Gene, KCNQ2, is Mutated in an Inherited Epilepsy of Newborns" <i>Nature Genetics</i> , January 1998, pp. 25-29, Vol. 18.	
	R31	SMITH, T. F. <i>et al.</i> "Comparison of Biosequences" <i>Advances in Applied Mathematics</i> , 1981, pp. 482-489, Vol. 2.	
	R32	TOWBIN, H. <i>et al.</i> "Electrophoretic Transfer of Proteins from Polyacrylamide Gels to Nitrocellulose Sheets: Procedure and some applications" <i>Proc. Natl. Acad. Sci. USA</i> , September 1979, pp. 4350-4354, Vol. 76, No. 9.	
	R33	WANG, H-S. <i>et al.</i> "KCNQ2 and KCNQ3 Potassium Channel Subunits: Molecular Correlates of the M-Channel" <i>Science</i> , December 4, 1998, pp. 1890-1893, Vol. 282.	
	R34	WEN, S-Y. <i>et al.</i> "Rapid Detection of the Known SNPs of CYP2C9 using Oligonucleotide Microarray" <i>World J. Gastroenterol.</i> , 2003, pp. 1342-1346, Vol. 9, No. 6.	
✓	R35	WU, D. Y. <i>et al.</i> "Allele-Specific Enzymatic Amplification of β -Globin Genomic DNA for Diagnosis of Sickle Cell Anemia" <i>Proc. Natl. Acad. Sci. USA</i> , April 1989, pp. 2757-2760, Vol. 86.	

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/OC/	R36	JENTSCH, T. J. <i>et al.</i> "Pathophysiology of KCNQ Channels: Neonatal Epilepsy and Progressive Deafness" <i>Epilepsia</i> , 2000, pp. 1068-1069, Vol. 41, No. 8.	
/OC/	R37	TINEL, N. <i>et al.</i> "The KCNQ Potassium Channel: Splice Variants, Functional and Developmental Expression. Brain Localization and Comparison with KCNQ3" <i>FEBS Letters</i> , November 6, 1998, pp. 171-176, Vol. 438, No. 3.	
/OC/	R38	SMITH, J. S. <i>et al.</i> "Differential Expression of KCNQ2 Splice Variants: Implications to M Current Function during Neuronal Development" <i>Journal of Neuroscience</i> , February 15, 2001, pp. 1096-1103, Vol. 21, No. 4.	
	R39	SwissProt Accession No. O43526.	
	R40	EMBL Accession No. NM_172107.	
	R41	EMBL Accession No. NM_172106.	
	R42	EMBL Accession No. NM_004518.	
	R43	EMBL Accession No. NM_172108.	
	R44	EMBL Accession No. NM_172109.	
	R45	Genbank Accession No. AF086924.	
	R46	Genbank Accession No. AF033348.	
	R47	RefseqN Accession No. NT_006051.	

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